Supplementary Information

Expression of Active Fluorophore Proteins in the Milk of Transgenic Pigs Bypassing the Secretory Pathway

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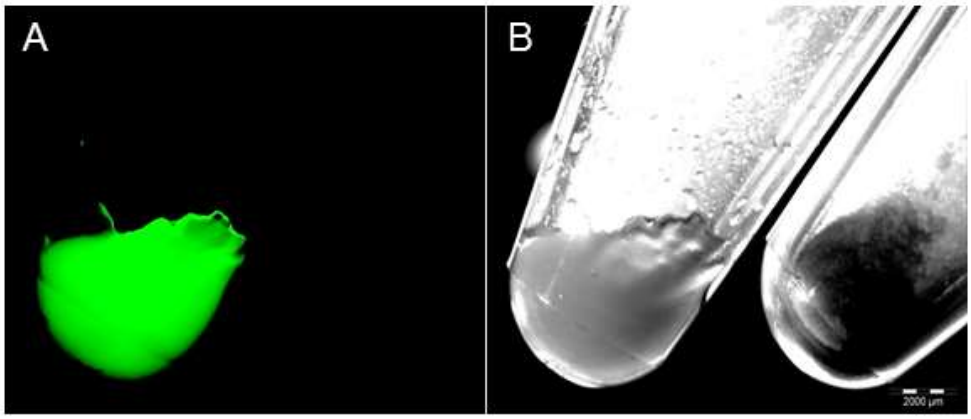
Short title: Fluorophores from transgenic milk

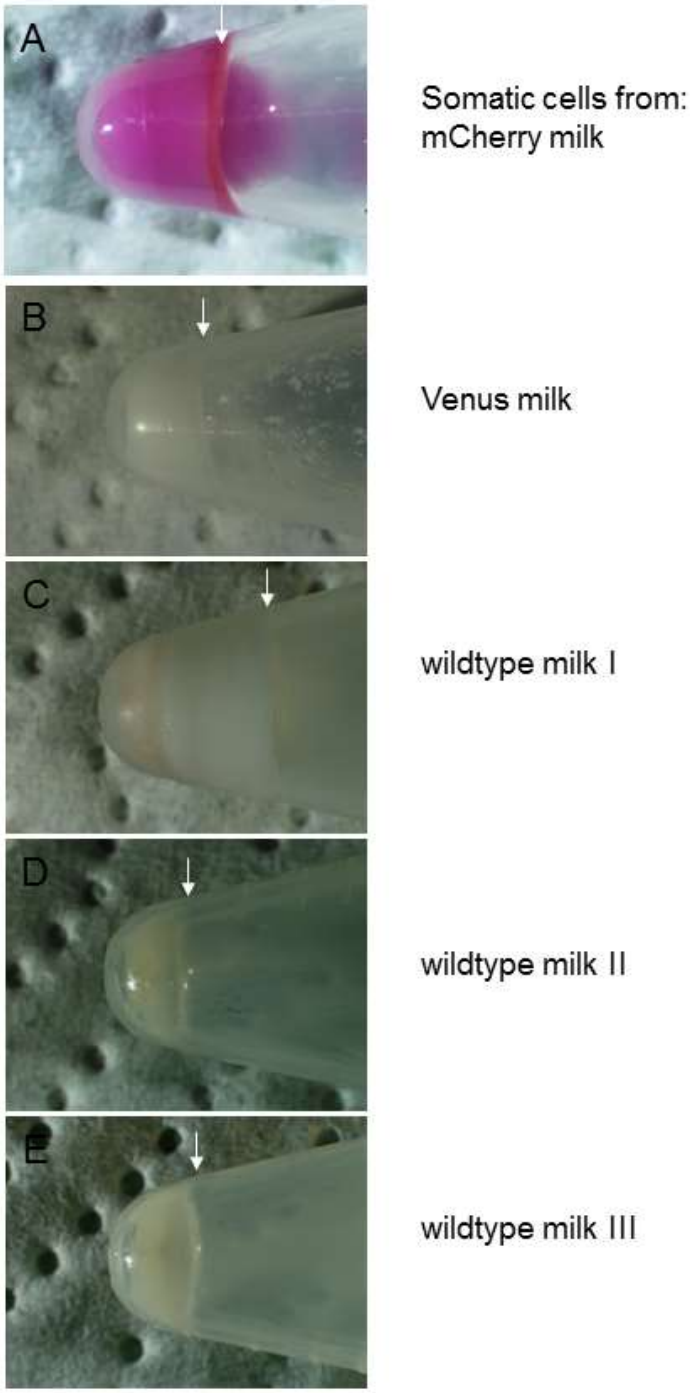
Key words: Bioreactor, Recombinant protein, Secretory pathway, Exfoliated cell, Signal peptide, Sleeping Beauty transposition.



Supplementary Fig. S1. Purified Venus protein

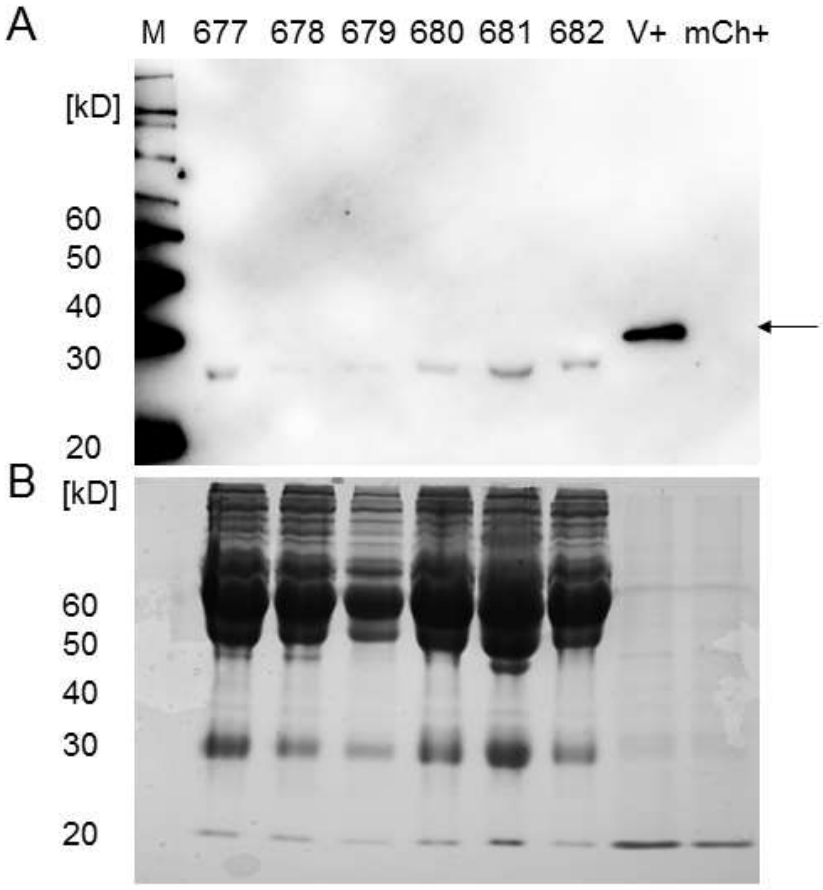
A) Dried fraction F10 (left) and dried non-transgenic milk powder (right) shown under specific excitation of Venus. The tube contains 200 µg of Venus protein, lyophilised from 500 µl of fraction F10 (Fig.2g).

B) Corresponding white light image. The samples are on the bottom of standard 1.5 ml centrifuge tubes.



Supplementary Fig. S2 Amount of exfoliated cells in sow milk

Identical volumes (15 ml) of sow milk at midlactation (d10-d15) from A) a mCherry transgenic sow, B) a Venus transgenic sow, and C-E) three wildtype sows were centrifuged. The amounts of the cell pellets are indicated by arrows.



Supplementary Fig. S3. Absence of Venus protein in blood plasma

A) Plasma fractions of 5 Venus transposon animals (#677 - #681), a non-transgenic littermate (#682), and milk samples from a Venus (V+) and mCherry (mCh+) transposon sows were probed with an anti-Venus antibody.

B) Corresponding Coomassie stained gel.